

Kam



1600

RAW SEQUENCE LISTING

DATE: 05/09/2003

PATENT APPLICATION: US/09/839,577A

TIME: 08:48:50

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05092003\I839577A.raw

ENTERED

4 <110> APPLICANT: Hahn, Klaus M.
 5 Touthkine, Alexei
 6 Muthyala, Rajeev
 7 Kraynov, Vadim
 8 Burton, Dennis R.
 9 Chamberlain, Chester
 10 The Scripps Research Institute et al.
 12 <120> TITLE OF INVENTION: Labeled Peptides, Proteins and Antibodies and Processes and Intermediates
 13 Useful for their Preparation
 15 <130> FILE REFERENCE: 1361.007US1
 17 <140> CURRENT APPLICATION NUMBER: US 09/839,577A
 18 <141> CURRENT FILING DATE: 2001-04-20
 20 <150> PRIOR APPLICATION NUMBER: US 60/279,302
 21 <151> PRIOR FILING DATE: 2001-03-28
 23 <150> PRIOR APPLICATION NUMBER: PCT/US00/26821
 24 <151> PRIOR FILING DATE: 2000-09-29
 26 <150> PRIOR APPLICATION NUMBER: US 60/218,113
 27 <151> PRIOR FILING DATE: 2000-07-13
 29 <160> NUMBER OF SEQ ID NOS: 15
 31 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 33 <210> SEQ ID NO: 1
 34 <211> LENGTH: 44
 35 <212> TYPE: PRT
 36 <213> ORGANISM: Homo sapiens
 38 <400> SEQUENCE: 1
 39 Lys Lys Lys Glu Lys Glu Arg Pro Glu Ile Ser Leu Pro Ser Asp Phe
 40 1 5 10 15
 41 Glu His Thr Ile His Val Gly Phe Asp Ala Cys Thr Gly Glu Phe Thr
 42 20 25 30
 43 Gly Met Pro Glu Gln Trp Ala Arg Leu Leu Gln Thr
 44 35 40
 46 <210> SEQ ID NO: 2
 47 <211> LENGTH: 16
 48 <212> TYPE: PRT
 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: A synthetic peptide.
 54 <400> SEQUENCE: 2
 55 Ala Lys Ala Ala Arg Ala Ala Ala Lys Ala Ala Arg Ala Cys Ala
 56 1 5 10 15
 58 <210> SEQ ID NO: 3
 59 <211> LENGTH: 6
 60 <212> TYPE: PRT

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61 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: A synthetic peptide.
W--> 66 <221> NAME/KEY: SITE
67 <222> LOCATION: 3
68 <223> OTHER INFORMATION: Xaa = SAOD = alpha-Boc-beta[N-(2-Chlorobenzoyloxycarbonyl)-N-
69      Methylaminooxy
70      Acetyl]-alpha,beta-Diaminopropionic Acid [Boc-2-Cl-Z-(SA)Dapa-OH].
W--> 72 <221> SITE
73 <222> LOCATION: 6
74 <223> OTHER INFORMATION: Xaa = MPAL = The C-terminal mercaptopropionyl-leucine group
generated by
75      cleavage of a peptide from TAMPAL resin.
W--> 77 <400> 3
W--> 78 Leu Tyr Xaa Ala Gly Xaa
79 1      5
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 5
83 <212> TYPE: PRT
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: A synthetic peptide.
89 <400> SEQUENCE: 4
90 Cys Arg Ala Asn Lys
91 1      5
93 <210> SEQ ID NO: 5
94 <211> LENGTH: 10
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: A synthetic peptide.
W--> 101 <221> NAME/KEY: SITE
102 <222> LOCATION: 3
103 <223> OTHER INFORMATION: Xaa = SAOD = alpha-Boc-beta[N-(2-Chlorobenzoyloxycarbonyl)-N-
104      Methylaminooxy
105      Acetyl]-alpha,beta-Diaminopropionic Acid [Boc-2-Cl-Z-(SA)Dapa-OH]
W--> 107 <400> 5
W--> 108 Leu Tyr Xaa Ala Gly Cys Arg Ala Asn Lys
109 1      5      10
111 <210> SEQ ID NO: 6
112 <211> LENGTH: 33
113 <212> TYPE: PRT
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: A synthetic peptide.
119 <400> SEQUENCE: 6
120 Cys Glu Tyr Arg Ile Asp Arg Val Arg Leu Phe Val Asp Lys Leu Asp
121 1      5      10      15
122 Asn Ile Ala Gln Val Pro Arg Val Gly Ala Ala His His His His His
123      20      25      30

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124 His
127 <210> SEQ ID NO: 7
128 <211> LENGTH: 33
129 <212> TYPE: PRT
130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: A synthetic peptide.
135 <400> SEQUENCE: 7
136 Cys Glu Tyr Arg Ile Asp Arg Val Arg Leu Phe Val Asp Lys Leu Asp
137 1 5 10 15
138 Asn Ile Ala Gln Val Pro Arg Val Gly Ala Ala His His His His His
139 20 25 30
140 His
143 <210> SEQ ID NO: 8
144 <211> LENGTH: 28
145 <212> TYPE: PRT
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: A synthetic peptide.
W--> 151 <221> NAME/KEY: SITE
152 <222> LOCATION: 1
153 <223> OTHER INFORMATION: Xaa = SAOD = alpha-Boc-beta[N-(2-Chlorobenzyloxycarbonyl)-N-
154 Methylaminooxy
155 Acetyl]-alpha,beta-Diaminopropionic Acid [Boc-2-Cl-Z-(SA)Dapa-OH]
W--> 157 <221> SITE
158 <222> LOCATION: 28
159 <223> OTHER INFORMATION: Xaa = MPAL = The C-terminal mercaptopropionyl-leucine group
generated by
160 cleavage of a peptide from TAMPAL resin.
W--> 162 <400> 8
W--> 163 Xaa Lys Lys Lys Lys Glu Lys Glu Arg Pro Glu Ile Ser Leu Pro Ser Asp
164 1 5 10 15
165 Phe Glu His Thr Ile His Val Gly Phe Asp Ala Xaa
166 20 25
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 18
170 <212> TYPE: PRT
171 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 9
174 Cys Thr Gly Glu Phe Thr Gly Met Pro Glu Gln Trp Ala Arg Leu Leu
175 1 5 10 15
176 Gln Thr
179 <210> SEQ ID NO: 10
180 <211> LENGTH: 10
181 <212> TYPE: PRT
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: A synthetic peptide.
W--> 187 <221> NAME/KEY: SITE
188 <222> LOCATION: 3

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189 <223> OTHER INFORMATION: Xaa = SAOD = alpha-Boc-beta[N-(2-Chlorobenzyloxycarbonyl)-N-
Methylaminooxy
190 Acetyl]-alpha,beta-Diaminopropionic Acid [Boc-2-Cl-Z-(SA)Dapa-OH]
W--> 192 <400> 10
W--> 193 Leu Tyr Xaa Ala Gly Cys Arg Ala Asn Lys
194 1 5 10
196 <210> SEQ ID NO: 11
197 <211> LENGTH: 45
198 <212> TYPE: PRT
199 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: A synthetic peptide.
W--> 204 <221> NAME/KEY: SITE
205 <222> LOCATION: 1
206 <223> OTHER INFORMATION: Xaa = SAOD = alpha-Boc-beta[N-(2-Chlorobenzyloxycarbonyl)-N-
Methylaminooxy
207 Acetyl]-alpha,beta-Diaminopropionic Acid [Boc-2-Cl-Z-(SA)Dapa-OH]
W--> 209 <400> 11
W--> 210 Xaa Lys Lys Lys Glu Lys Glu Arg Pro Glu Ile Ser Leu Pro Ser Asp
211 1 5 10 15
212 Phe Glu His Thr Ile His Val Gly Phe Asp Ala Cys Thr Gly Glu Phe
213 20 25 30
214 Thr Gly Met Pro Glu Gln Trp Ala Arg Leu Leu Gln Thr
215 35 40 45
217 <210> SEQ ID NO: 12
218 <211> LENGTH: 38
219 <212> TYPE: PRT
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: A synthetic peptide.
W--> 225 <221> NAME/KEY: SITE
226 <222> LOCATION: 3
227 <223> OTHER INFORMATION: Xaa = SAOD = alpha-Boc-beta[N-(2-Chlorobenzyloxycarbonyl)-N-
Methylaminooxy
228 Acetyl]-alpha,beta-Diaminopropionic Acid [Boc-2-Cl-Z-(SA)Dapa-OH]
W--> 230 <400> 12
W--> 231 Leu Tyr Xaa Ala Gly Cys Glu Tyr Arg Ile Asp Arg Val Arg Leu Phe
232 1 5 10 15
233 Val Asp Lys Leu Asp Asn Ile Ala Gln Val Pro Arg Val Gly Ala Ala
234 20 25 30
235 His His His His His His
236 35
238 <210> SEQ ID NO: 13
239 <211> LENGTH: 120
240 <212> TYPE: PRT
241 <213> ORGANISM: Homo sapiens
243 <400> SEQUENCE: 13
244 Asp Ile Gln Asn Pro Asp Ile Thr Ser Ser Arg Tyr Arg Gly Leu Pro
245 1 5 10 15
246 Ala Pro Gly Pro Ser Pro Ala Asp Lys Lys Arg Ser Gly Lys Lys Lys
247 20 25 30
248 Ile Ser Lys Ala Asp Ile Gly Ala Pro Ser Gly Phe Lys His Val Ser

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249          35          40          45
250 His Val Gly Trp Asp Pro Gln Asn Gly Phe Asp Val Asn Asn Leu Asp
251          50          55          60
252 Pro Asp Leu Arg Ser Leu Phe Ser Arg Ala Gly Ile Ser Glu Ala Gln
253 65          70          75          80
254 Leu Thr Asp Ala Glu Thr Ser Lys Leu Ile Tyr Asp Phe Ile Glu Asp
255          85          90          95
256 Gln Gly Gly Leu Glu Ala Val Arg Gln Glu Met Arg Arg Gln Glu Pro
257          100          105          110
258 Leu Pro Pro Pro Pro Pro Pro Ser
259          115          120
262 <210> SEQ ID NO: 14
263 <211> LENGTH: 502
264 <212> TYPE: PRT
265 <213> ORGANISM: Homo sapiens
267 <400> SEQUENCE: 14
268 Met Ser Gly Gly Pro Met Gly Gly Arg Pro Gly Gly Arg Gly Ala Pro
269 1          5          10          15
270 Ala Val Gln Gln Asn Ile Pro Ser Thr Leu Leu Gln Asp His Glu Asn
271          20          25          30
272 Gln Arg Leu Phe Glu Met Leu Gly Arg Lys Cys Leu Thr Leu Ala Thr
273          35          40          45
274 Ala Val Val Gln Leu Tyr Leu Ala Leu Pro Pro Gly Ala Glu His Trp
275          50          55          60
276 Thr Lys Glu His Cys Gly Ala Val Cys Phe Val Lys Asp Asn Pro Gln
277 65          70          75          80
278 Lys Ser Tyr Phe Ile Arg Leu Tyr Gly Leu Gln Ala Gly Arg Leu Leu
279          85          90          95
280 Trp Glu Gln Glu Leu Tyr Ser Gln Leu Val Tyr Ser Thr Pro Thr Pro
281          100          105          110
282 Phe Phe His Thr Phe Ala Gly Asp Asp Cys Gln Ala Gly Leu Asn Phe
283          115          120          125
284 Ala Asp Glu Asp Glu Ala Gln Ala Phe Arg Ala Leu Val Gln Glu Lys
285          130          135          140
286 Ile Gln Lys Arg Asn Gln Arg Gln Ser Gly Asp Arg Arg Gln Leu Pro
287 145          150          155          160
288 Pro Pro Pro Thr Pro Ala Asn Glu Glu Arg Arg Gly Gly Leu Pro Pro
289          165          170          175
290 Leu Pro Leu His Pro Gly Gly Asp Gln Gly Gly Pro Pro Val Gly Pro
291          180          185          190
292 Leu Ser Leu Gly Leu Ala Thr Val Asp Ile Gln Asn Pro Asp Ile Thr
293          195          200          205
294 Ser Ser Arg Tyr Arg Gly Leu Pro Ala Pro Gly Pro Ser Pro Ala Asp
295          210          215          220
296 Lys Lys Arg Ser Gly Lys Lys Lys Ile Ser Lys Ala Asp Ile Gly Ala
297 225          230          235          240
298 Pro Ser Gly Phe Lys His Val Ser His Val Gly Trp Asp Pro Gln Asn
299          245          250          255
300 Gly Phe Asp Val Asn Asn Leu Asp Pro Asp Leu Arg Ser Leu Phe Ser

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/09/2003
PATENT APPLICATION: US/09/839,577A TIME: 08:48:51

Input Set : A:\PTO.AMC.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 3,6 ✓
Seq#:5; Xaa Pos. 3 ✓
Seq#:8; Xaa Pos. 1,28 ✓
Seq#:10; Xaa Pos. 3 ✓
Seq#:11; Xaa Pos. 1 ✓
Seq#:12; Xaa Pos. 3 ✓

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:10; Line(s) 189
Seq#:11; Line(s) 206
Seq#:12; Line(s) 227

VERIFICATION SUMMARY

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Input Set : A:\PTO.AMC.txt

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L:66 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:72 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:77 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:101 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:107 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:151 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:157 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:162 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:187 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:192 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:204 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:209 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:225 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:230 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:12
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0